



# Open Source CMS

## A performance comparision

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- Introduction
  - Products to Compare
  - Test Environment
- Test Cases (home, catalogue, product pages)
  - Performance
    - Google PageSpeed Inside
    - Speed Test using Pingdom
  - Scalability
    - Load Test using Blitz
  - Maintainability
    - Source Code – cloc
    - Community to maintain the source code
  - W3C Markup Validations
- Conclusion



# Introduction



# Introduction

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## Open Source Products, compared with Odoo

odoo cms

Drupal™

odoo commerce



- Version Saas4
- Standard Data / Modules
  - Demo data with Odoo Website, Commerce, Forum, News, etc

YourCompany

Home Shop Forum News Contact us | Sign in

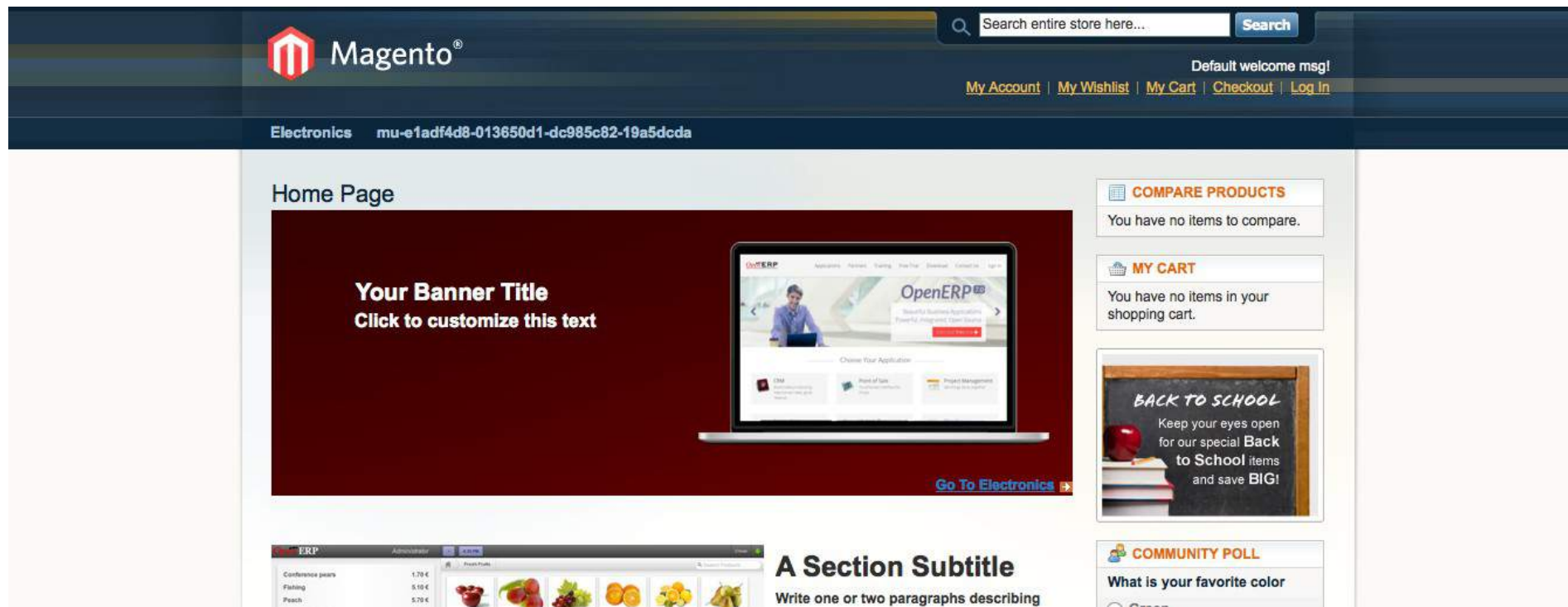
**Your Banner Title**

**Click to customize this text**

Contact us



- Version 1.8.1.0
- Custom Data / Module
  - Home page and widgets
  - Added some products and their description



The screenshot displays a Magento 1.8.1.0 storefront. The header features the Magento logo, a search bar with the text "Search entire store here...", and navigation links: "My Account", "My Wishlist", "My Cart", "Checkout", and "Log In". A "Default welcome msg!" is also visible. Below the header, a "Home Page" banner area contains a large red banner with the text "Your Banner Title" and "Click to customize this text". To the right of the banner is a "COMPARE PRODUCTS" widget stating "You have no items to compare." Below this is a "MY CART" widget stating "You have no items in your shopping cart." Further down is a "COMMUNITY POLL" widget asking "What is your favorite color" with a "Green" option visible. The main content area includes a "Go To Electronics" button and a "A Section Subtitle" section with the text "Write one or two paragraphs describing". At the bottom, there is a table of products:

Product Name	Price
Conference pears	1.70 €
Fishing	5.10 €
Peach	5.70 €

Below the table are images of various fruits: pears, apples, grapes, oranges, lemons, and kiwis.

- Version 7.27
- Custom Data / Modules
  - CK-Editor & CK-Finder
  - Ubercart for e-commerce, Rules, ctools, views, entity



drupal.openerp.co.in

Home

Shop

## Navigation

- [Catalog](#)
- [Compose tips](#)
- [Shopping cart](#)

## User login

Username \*

admin

Password \*

••••••••

- [Create new account](#)
- [Request new password](#)

## HDD

Submitted by admin on Wed, 05/21/2014 - 19:02

30-day money-back guarantee

Free Shipping in U.S.

Buy now, get in 2 days

Our products are designed for small to medium size companies willing to optimize their performance.

Price: \$220.00

Add to cart

**\$220.00**[Read more](#) [Log in or register](#) to post comments

- Version 1.6
- No Custom Data / Modules
  - Use default demo shop



*Your Logo*  
a new experience



Cart (empty)

WOMEN

DRESSES

T-SHIRTS

BLOG

EXCEPTEUR  
OCCAECAT

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin tristique in tortor et dignissim. Quisque non tempor leo. Maecenas egestas sem elit

SHOP NOW !

3DAYS

SALE  
GET UP TO  
25% OFF





# Performance

Google PageSpeed Insight & Pingdom



# Google PageSpeed Insights

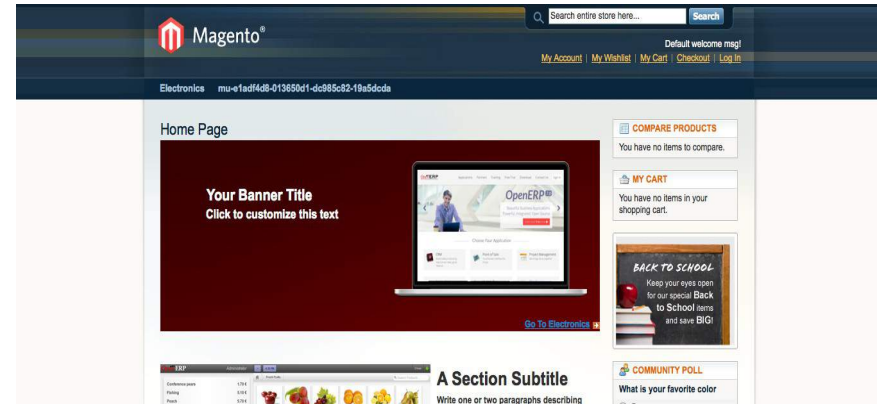
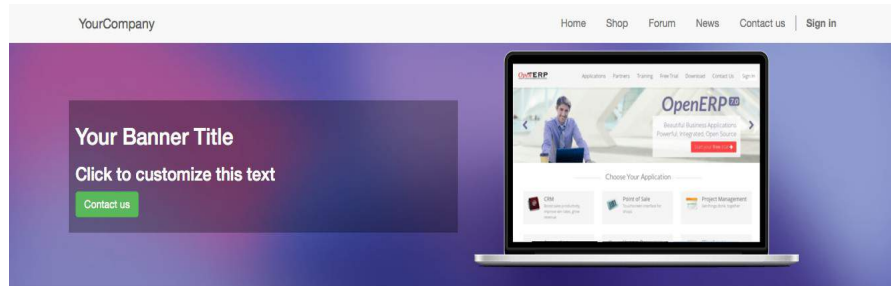
Home page on desktop

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>



# Home Page



## Navigation

- [Catalog](#)
- [Compose tips](#)
- [Shopping cart](#)

## User login

Username \*

admin

Password \*

\*\*\*\*\*

- [Create new account](#)
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[Read more](#) [Log in or register to post comments](#)

\$220.00



Your Logo  
a new experience

Search

Cart (empty)

WOMEN DRESSES T-SHIRTS BLOG

EXCEPTEUR  
OCCAECAT


Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin tristique in tortor et dignissim. Quisque non tempor leo. Maecenas eget sem elit.

[SHOP NOW !](#)

3 DAYS  
SALE  
GET UP TO  
25% OFF




# Odoo vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. <u>Saas4</u> )	Drupal ( ver. 7.27 )
 Home Page	89 Rating	85 Rating
Render-blocking JavaScript ?	1	3
Render-blocking CSS ?	1	11
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Home Page	89 Rating	76 Rating
Render-blocking JavaScript ?	1	13
Render-blocking CSS ?	1	2
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗


Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Odoo vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. <u>Saas4</u> )	Prestashop ( ver. 1.6.0.6 )
 Home Page	89 Rating	66 Rating
Render-blocking JavaScript ?	1	0
Render-blocking CSS ?	1	25
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✗
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Home Page	89 Rating	85 Rating	76 Rating	66 Rating
Render-blocking JavaScript ?	1	3	13	0
Render-blocking CSS ?	1	11	2	25
Minify Javascript	✓	✗	✗	✗
Minify CSS	✓	✗	✗	✗
Minify HTML	✓	✓	✓	✗
Leverage browser caching	✓	✗	✗	✗
Avoid landing page redirects ?	✓	✓	✓	✓
Fast Response Time	✓	✗	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
 Rating is out of 100



# Google Page Speed Insights

Home page on mobile


Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>





# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 88 Rating Speed: 68 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 58 Rating Speed: 64 Rating
Legible Font Size	✓	✗
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✗
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 99 Rating Speed: 55 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Summary : Google Page Speed

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 88 Rating Speed: 68 Rating	User Exp. : 58 Rating Speed: 64 Rating	User Exp. : 99 Rating Speed: 55 Rating
Legible Font Size	✓	✓	✗	✓
Size tap targets appropriately	✓	✗	✗	✗
Viewport Configured	✓	✓	✗	✓
Viewport Content size	✓	✗	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Google PageSpeed Insights

Product Catalogue on Desktop

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>



# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Catalog	84 Rating	89 Rating
Render-blocking JavaScript ?	3	4
Render-blocking CSS ?	3	10
Minify Javascript	✗	✗
Minify CSS	✗	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Catalog	84 Rating	71 Rating
Render-blocking JavaScript ?	3	13
Render-blocking CSS ?	3	2
Minify Javascript	✗	✗
Minify CSS	✗	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	84 Rating	63 Rating
Render-blocking JavaScript ?	3	0
Render-blocking CSS ?	3	30
Minify Javascript	✗	✗
Minify CSS	✗	✗
Minify HTML	✓	✗
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	84 Rating	89 Rating	71 Rating	63 Rating
Render-blocking JavaScript ?	3	4	13	0
Render-blocking CSS ?	3	10	2	30
Minify Javascript	✗	✗	✗	✗
Minify CSS	✗	✗	✗	✗
Minify HTML	✓	✓	✓	✗
Leverage browser caching	✓	✗	✗	✗
Avoid landing page redirects ?	✓	✓	✓	✓
Fast Response Time	✓	✗	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
 Rating is out of 100



# Google PageSpeed Insights


Product Catalogue on Mobile

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>




# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 86 Rating  Speed: 73 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 59 Rating Speed: 59 Rating
Legible Font Size	✓	✗
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✗
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Summary : Google Page Speed

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 86 Rating Speed: 73 Rating	User Exp. : 59 Rating Speed: 59 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓	✗	✓
Size tap targets appropriately	✓	✗	✗	✗
Viewport Configured	✓	✓	✗	✓
Viewport Content size	✓	✗	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Google PageSpeed Insights


Product Page on Desktop

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>



# Odoo Vs Drupal


Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Form	89 Rating	87 Rating
Render-blocking JavaScript ?	2	4
Render-blocking CSS ?	3	10
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✗	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100






# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Form	89 Rating	70 Rating
Render-blocking JavaScript ?	2	17
Render-blocking CSS ?	3	3
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✗	✗


Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	89 Rating	58 Rating
Render-blocking JavaScript ?	2	0
Render-blocking CSS ?	3	27
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✗
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100

Using: Google PageSpeed Insights	OpenERP ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	89 Rating	87 Rating	70 Rating	58 Rating
Render-blocking JavaScript ?	2	4	17	0
Render-blocking CSS ?	3	10	3	27
Minify Javascript	✓	✗	✗	✗
Minify CSS	✓	✗	✗	✗
Minify HTML	✓	✓	✓	✗
Leverage browser caching	✓	✗	✗	✗
Avoid landing page redirects ?	✓	✓	✓	✓
Fast Response Time	✗	✓	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
 Rating is out of 100



# Google PageSpeed Insights


Product Page on Mobile

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>




# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 73 Rating Speed: 78 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 58 Rating Speed: 59 Rating
Legible Font Size	✓	✗
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✗
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Summary : Google Page Speed

Using: Google PageSpeed Insights	OpenERP ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 73 Rating Speed: 78 Rating	User Exp. : 58 Rating Speed: 59 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓	✗	✓
Size tap targets appropriately	✓	✗	✗	✗
Viewport Configured	✓	✓	✗	✓
Viewport Content size	✓	✗	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100





# Speed Test using Pingdom

Resources Loads to render page



# Resources Load to render page

Home Page	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )																																																																		
Performance Grade	91 / 100	87 / 100	85 / 100	59 / 100																																																																		
Requests	14	37	38	103																																																																		
# of JS	2	3	13	26																																																																		
# of CSS	2	19	3	27																																																																		
	<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>35.57%</td><td></td></tr><tr><td>Wait</td><td>32.79%</td><td></td></tr><tr><td>Receive</td><td>31.20%</td><td></td></tr><tr><td>DNS</td><td>0.42%</td><td></td></tr><tr><td>Send</td><td>0.02%</td><td></td></tr></table></div>	Connect	35.57%		Wait	32.79%		Receive	31.20%		DNS	0.42%		Send	0.02%		<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>48.73%</td><td></td></tr><tr><td>Wait</td><td>38.52%</td><td></td></tr><tr><td>Receive</td><td>12.10%</td><td></td></tr><tr><td>DNS</td><td>0.61%</td><td></td></tr><tr><td>Send</td><td>0.03%</td><td></td></tr></table></div>	Connect	48.73%		Wait	38.52%		Receive	12.10%		DNS	0.61%		Send	0.03%		<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>51.44%</td><td></td></tr><tr><td>Wait</td><td>28.97%</td><td></td></tr><tr><td>Receive</td><td>17.25%</td><td></td></tr><tr><td>DNS</td><td>2.04%</td><td></td></tr><tr><td>SSL</td><td>0.26%</td><td></td></tr><tr><td>Send</td><td>0.04%</td><td></td></tr></table></div>	Connect	51.44%		Wait	28.97%		Receive	17.25%		DNS	2.04%		SSL	0.26%		Send	0.04%		<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>84.52%</td><td></td></tr><tr><td>Wait</td><td>11.67%</td><td></td></tr><tr><td>Receive</td><td>3.28%</td><td></td></tr><tr><td>DNS</td><td>0.47%</td><td></td></tr><tr><td>SSL</td><td>0.05%</td><td></td></tr><tr><td>Send</td><td>0.01%</td><td></td></tr></table></div>	Connect	84.52%		Wait	11.67%		Receive	3.28%		DNS	0.47%		SSL	0.05%		Send	0.01%	
Connect	35.57%																																																																					
Wait	32.79%																																																																					
Receive	31.20%																																																																					
DNS	0.42%																																																																					
Send	0.02%																																																																					
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Receive	12.10%																																																																					
DNS	0.61%																																																																					
Send	0.03%																																																																					
Connect	51.44%																																																																					
Wait	28.97%																																																																					
Receive	17.25%																																																																					
DNS	2.04%																																																																					
SSL	0.26%																																																																					
Send	0.04%																																																																					
Connect	84.52%																																																																					
Wait	11.67%																																																																					
Receive	3.28%																																																																					
DNS	0.47%																																																																					
SSL	0.05%																																																																					
Send	0.01%																																																																					

As browser can load only 4 files in parallel on midsize traffic website, then latency time and number of resources to download impact time to load more resources

Odoo load **faster** because concatenate several files, minify and gzip the content, even all the modules installed

Product Catalogue	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
Performance Grade	89 / 100	87 / 100	85 / 100	75 / 100
# of Products on page	15	10	9	10
Requests	25	37	50	91
# of JS	4	4	13	28
# of CSS	4	19	3	30
	<div><p>Time Spent per State</p><div><div>Wait</div><div>38.91%</div><div></div></div><div><div>Receive</div><div>37.39%</div><div></div></div><div><div>Connect</div><div>23.67%</div><div></div></div><div><div>DNS</div><div>0.02%</div><div></div></div><div><div>Send</div><div>0.00%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>57.15%</div><div></div></div><div><div>Wait</div><div>35.69%</div><div></div></div><div><div>Receive</div><div>6.82%</div><div></div></div><div><div>DNS</div><div>0.32%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>66.65%</div><div></div></div><div><div>Wait</div><div>24.49%</div><div></div></div><div><div>Receive</div><div>7.97%</div><div></div></div><div><div>DNS</div><div>0.70%</div><div></div></div><div><div>SSL</div><div>0.17%</div><div></div></div><div><div>Send</div><div>0.02%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>83.53%</div><div></div></div><div><div>Wait</div><div>14.09%</div><div></div></div><div><div>Receive</div><div>1.93%</div><div></div></div><div><div>DNS</div><div>0.06%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>



# Resources Load to render page

Product Form	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
Performance Grade	84 / 100	87 / 100	86/100	58/ 100
Requests	13	31	54	74
# of JS	4	3	17	29
# of CSS	3	19	4	28
	<div><p>Time Spent per State</p><div><div>Receive</div><div>43.99%</div><div></div></div><div><div>Wait</div><div>36.11%</div><div></div></div><div><div>Connect</div><div>16.41%</div><div></div></div><div><div>DNS</div><div>3.48%</div><div></div></div><div><div>Send</div><div>0.00%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>42.62%</div><div></div></div><div><div>Receive</div><div>28.61%</div><div></div></div><div><div>Wait</div><div>27.41%</div><div></div></div><div><div>DNS</div><div>1.13%</div><div></div></div><div><div>Send</div><div>0.02%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>57.31%</div><div></div></div><div><div>Receive</div><div>22.39%</div><div></div></div><div><div>Wait</div><div>20.25%</div><div></div></div><div><div>DNS</div><div>0.03%</div><div></div></div><div><div>SSL</div><div>0.02%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>82.74%</div><div></div></div><div><div>Wait</div><div>14.72%</div><div></div></div><div><div>Receive</div><div>2.06%</div><div></div></div><div><div>DNS</div><div>0.47%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>



# Scaleablity

Using Blitz, simulate the 250 users



# Load Test using Blitz

Region – Virginia | Duration – 60 Seconds | Load – 1 To 250 Users

Computed using Blitz: <https://www.blitz.io>



## Magento, Prestashop, Drupa

- Ubuntu 14.04 latest LTS
- Apache 2.2 Server
- PHP 5 Framework
- MySQL Server 5.0

## Odoo

- Ubuntu 14.04 latest LTS
- Nginx 1.4
- Odoo Framework
- PostgreSQL 9.1



# Hardware Configuration

---

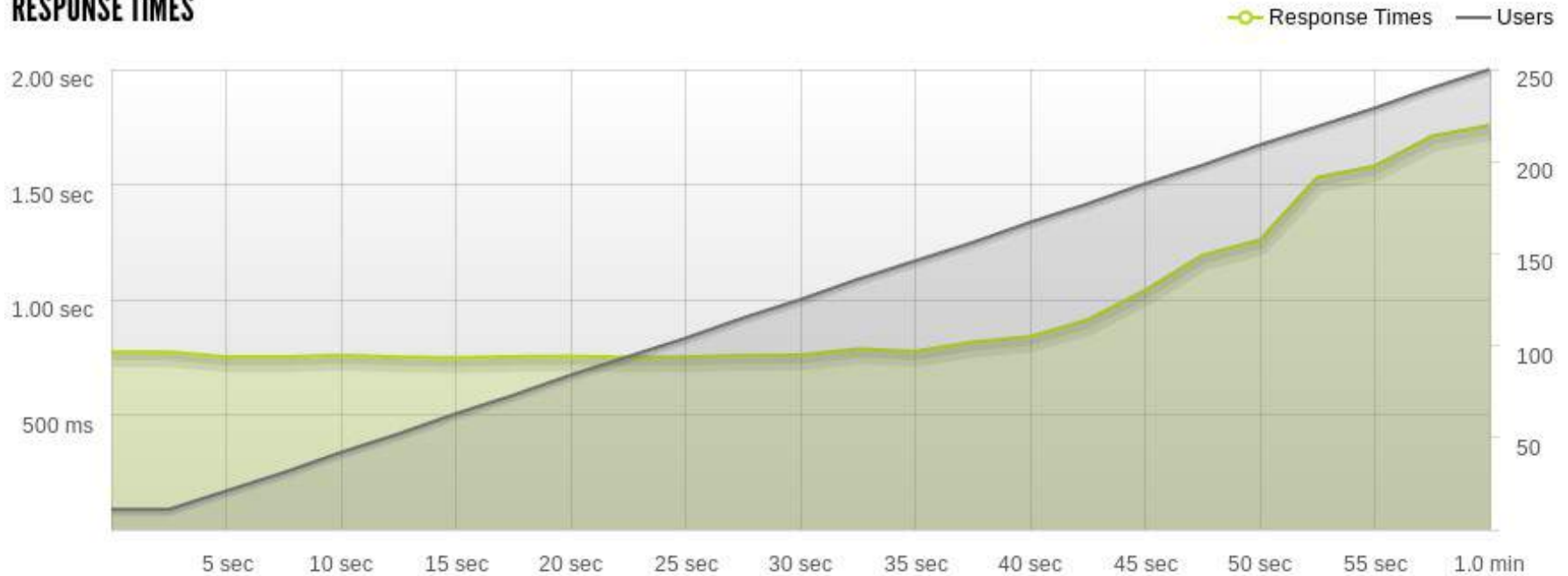
- IBM Server Series X3500 M4, 15 MB L3 Cache
- 300 GB GSAS Drive 10K RPMs
- Intel(R) Xeon(R) CPU E5-2620 0 @ 2.00GHz, 12 cores
- 8 GB Physical RAM
- 15 MBPS Dedicated Internet connection line

## Network:

- 15 MBPS dedicated Internet connection



## RESPONSE TIMES



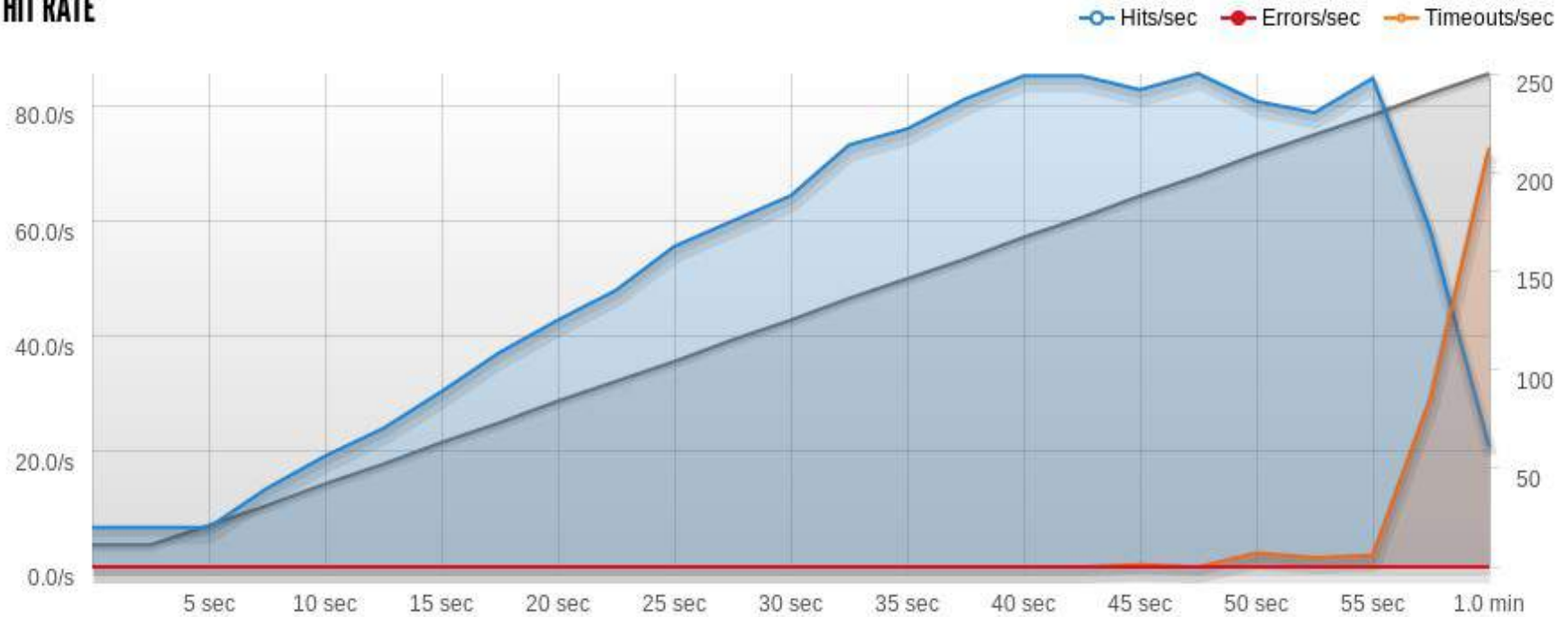
## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was: **88** hits per second

**Website and Ecommerce apps installed**

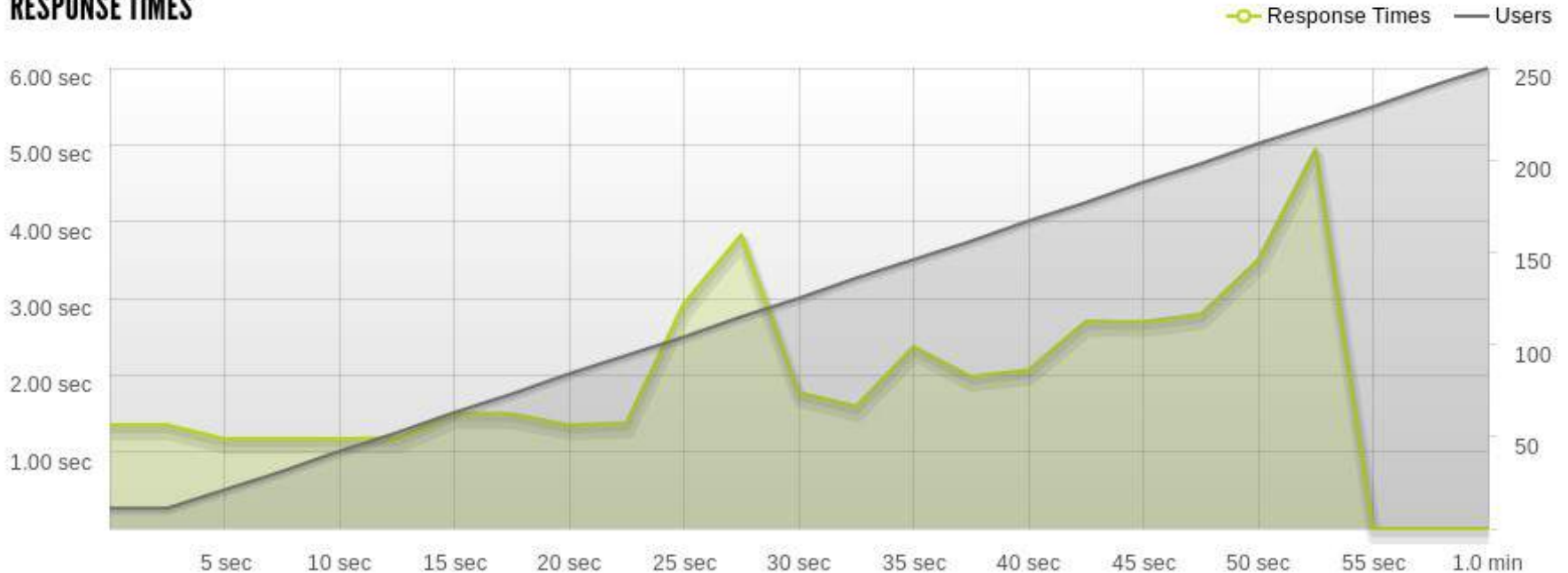
## HIT RATE



## Response Time :

- Fastest: **530 ms** | Slowest: **1655 ms** | Average: **829 ms**
- First time out happened at **47.4 second** at **198 users**
- **3646** successful hits in **60 sec**, avg **52,45,920 hits/day** capacity.

## RESPONSE TIMES

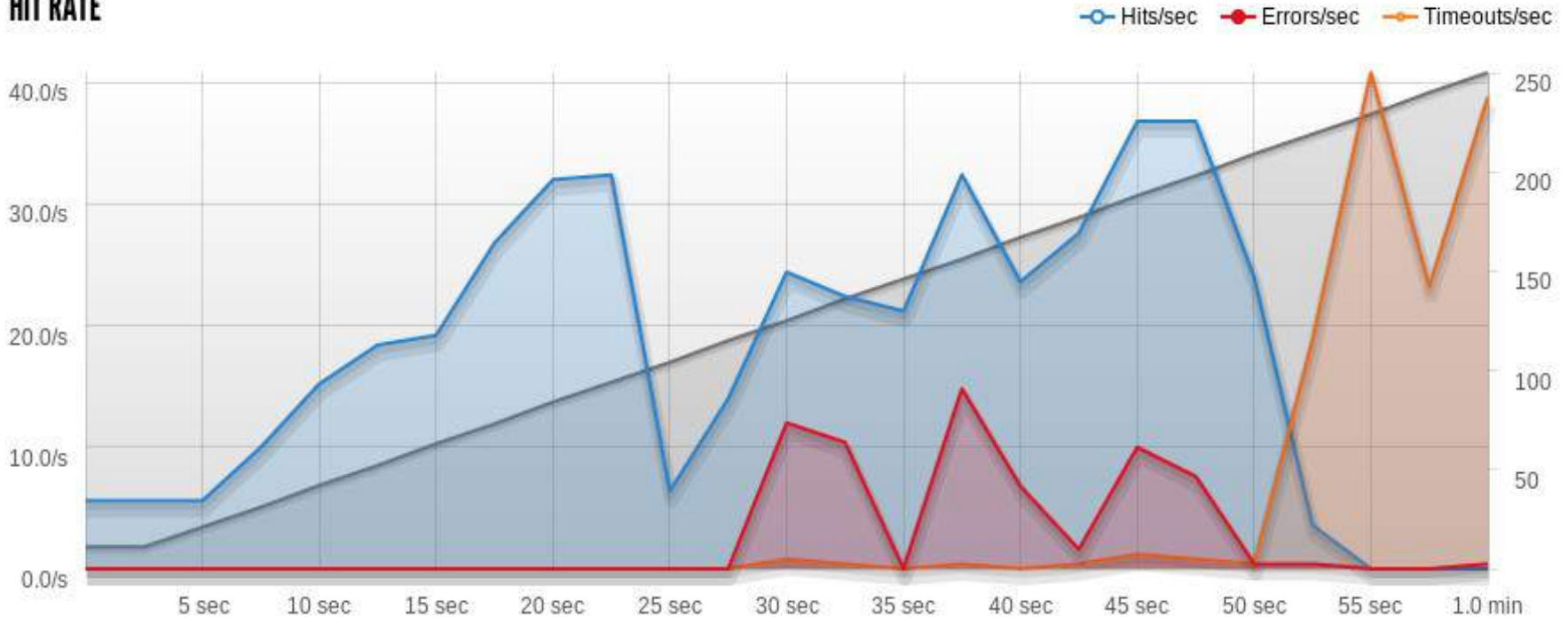


## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was : **37** hits per second

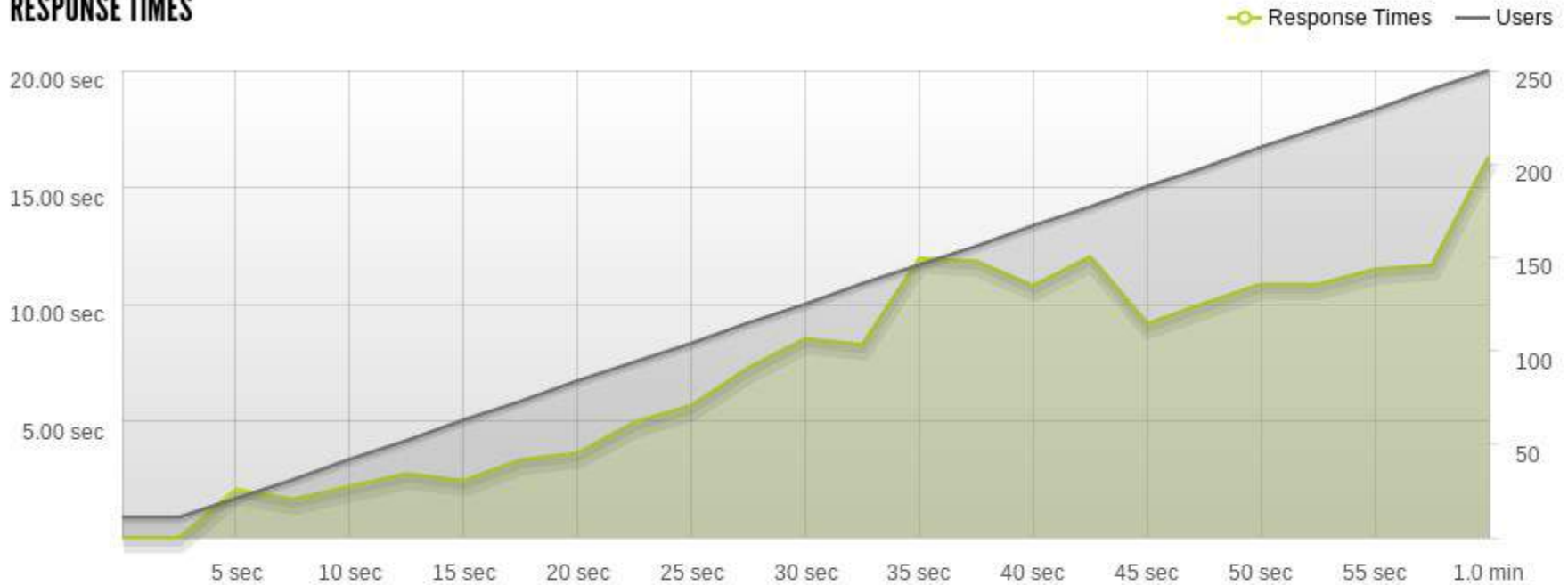
## HIT RATE



## Response Time :

- Fastest: **1172 ms** | Slowest: **4943 ms** | Average: **2141 ms**
- First time out happened at **30 second** at **125 users**
- **1,083** successful hits in **60 sec**, avg **15,59,520** hits/day capacity.

## RESPONSE TIMES

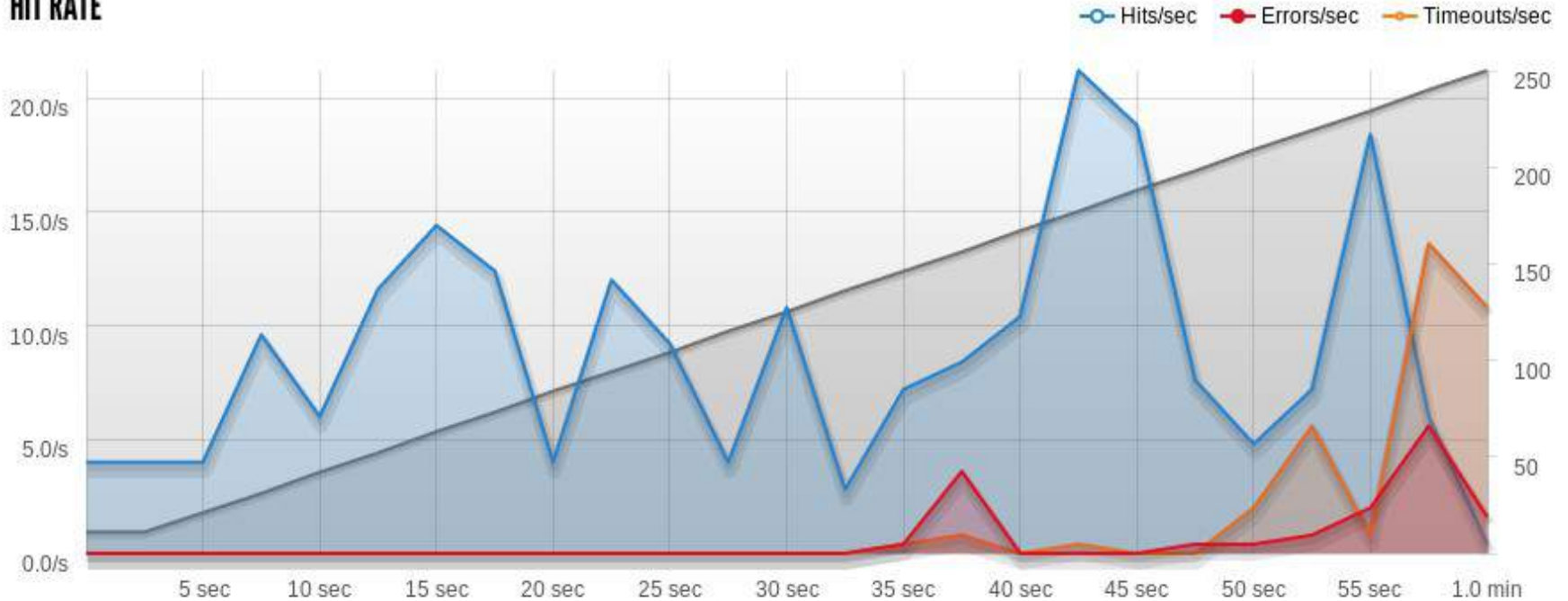


## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was : **21** hits per second

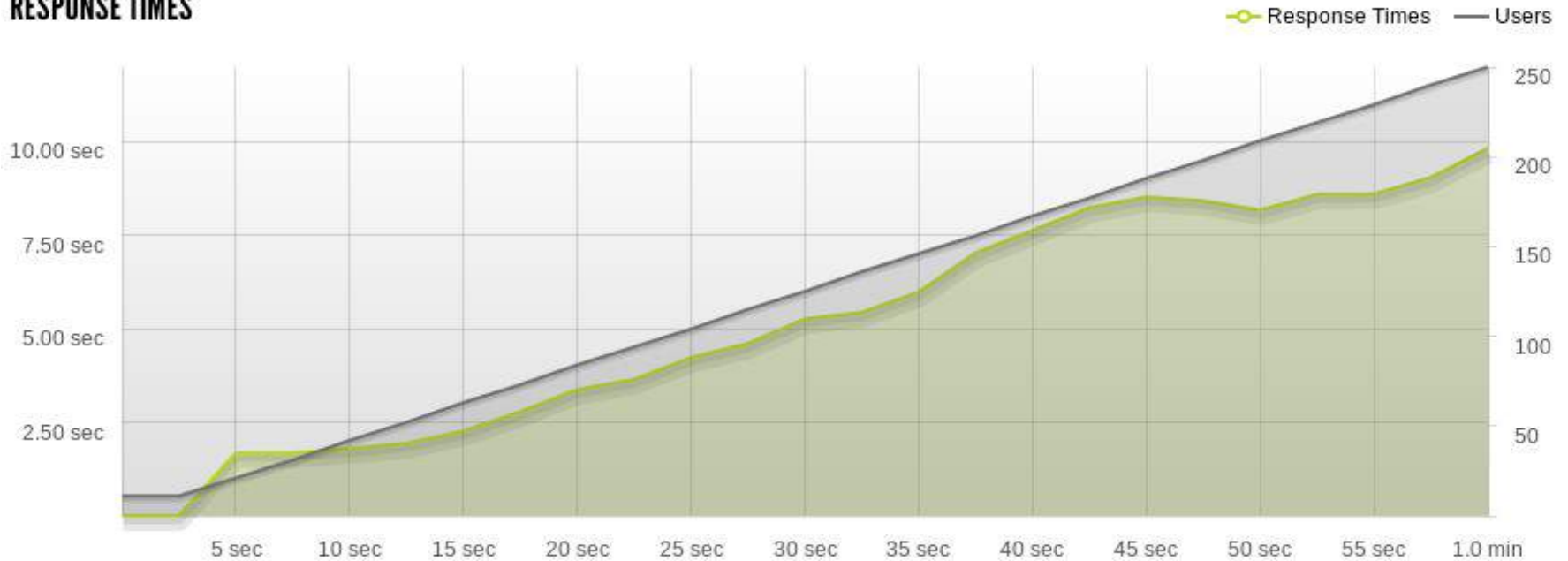
## HIT RATE



## Response Time :

- Fastest: **1639 ms** | Slowest: **16315 ms** | Average: **7813 ms**
- First time out happened at **35 second** at **146 users**
- **528** successful hits in **60 sec**, avg **0.7 M** hits/day capacity.

## RESPONSE TIMES

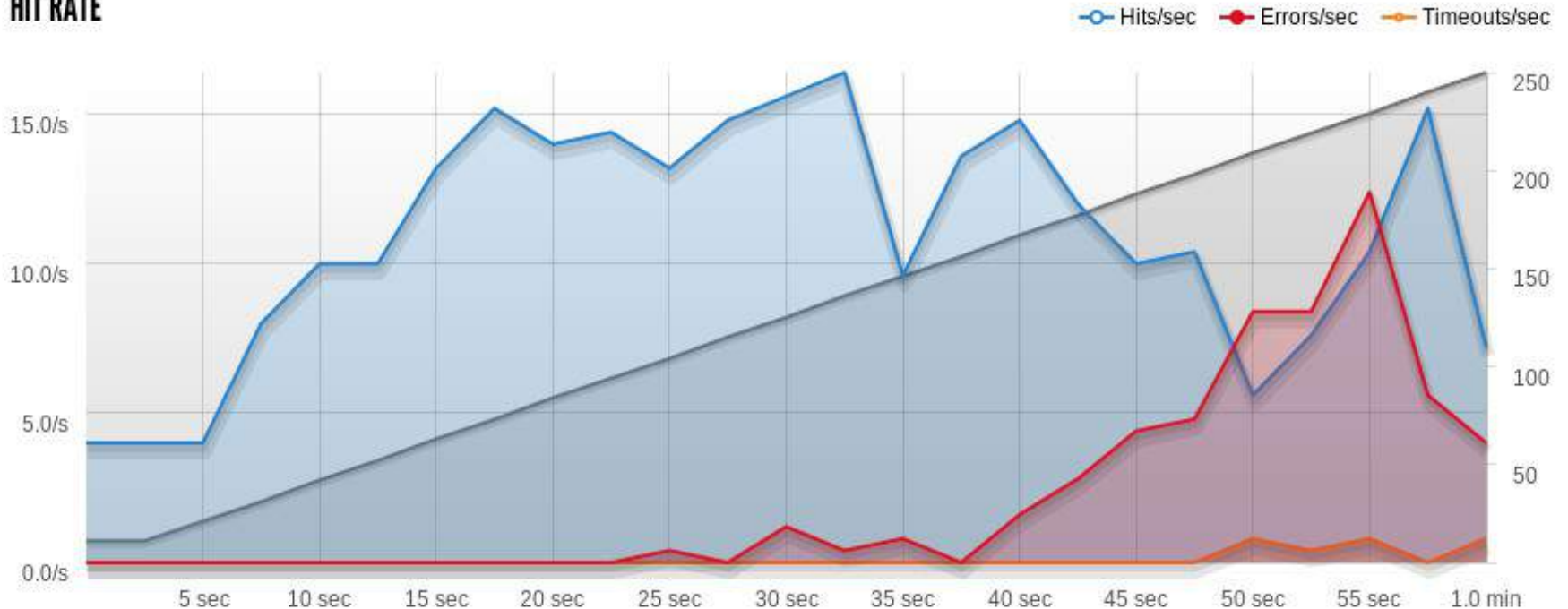


## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was : 16 hits per second

## HIT RATE









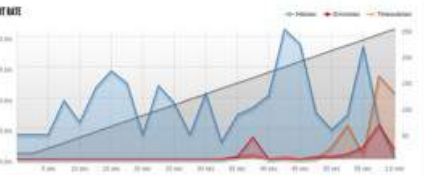

## Response Time :

- Fastest: **1678 ms** | Slowest: **9228 ms** | Average: **5598 ms**
- First time out happened at **25 second** at **104 users**
- **663** successful hits in **60 sec**, avg **0.95 M** hits/day capacity.





# Load Test Summary

Odoo ( ver. SaaS4 )	Drupal ( ver. 7.27 )	Magento ( ver. 18.1.0 )	Prestashop ( ver. 1.6.0.6 )
 <p>Response Time</p>	 <p>Response Time</p>	 <p>Response Time</p>	 <p>Response Time</p>
 <p>Hit Rate</p>	 <p>Hit Rate</p>	 <p>Hit Rate</p>	 <p>Hit Rate</p>
Successful Hits : 3646 (98.49%)	Successful Hits : 1083 (69.47%)	Successful Hits : 528 (81.11%)	Successful Hits : 1989 (82.05%)
Timeout : 56 (1.51%)	Timeout : 315 (20.21%)	Timeout : 86 (13.21%)	Timeout : 138 (17.08 %)
Error : 0 (0.0%)	Error : 161 (10.33%)	Error : 37 (5.68%)	Error : 7 (0.87%)
Data Transfer : 50.70 MB	Data Transfer : 39.04 MB	Data Transfer : 7.63 MB	Data Transfer : 62.19 MB
First Time Out : 47.4 sec	First Time Out : 30 sec	First Time Out : 35 sec	First Time Out : 25 sec
at 198 Users	at 125 Users	at 146 Users	at 104 Users

## Speed :

- Odoo is 3x times faster than the Drupal
- Odoo is 6x times faster than the Magento
- Odoo is 2x times faster than the Prestashop

## Scalability :

- Odoo timeout at 198 users
- Drupal timeout at 125 users
- Magento timeout at 148 users
- Prestashop timeout at 104 users



# W3C Markup Validation

HTML Validation



# W3C Check

Using: W3C Markup Validation	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
Home Page	29 Errors	0 Errors	2 Errors	4 Error
Product Catalogue	68 Errors	2 Errors	2 Errors	122 Errors
Product	10 Errors	0 Errors	1 Error	4 Errors

## Odoo's main problem

- Element meta is missing one or more of the following attributes: content, property.
- An img element must have an alt attribute, except under certain conditions
- The width attribute on the table element is obsolete. Use CSS instead.

Team is working on those issues , will be fixed soon



# Maintainability

lines of code and contributors



# Test 1 : Source Code

Code : using cloc	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
JavaScript	49K	124K	95K	56K
CSS	29K	28K	31K	74K
HTML / XML	8K + 376K	16K	6K + 295K	5k + 8K
Python / PHP	114K	58K + 99K	630K	223K

## Comparision between :

- Odoo : includes all modules. I.e accounting, wms, mrp, websites, etc...
- Drupal, Magento and Prestashop : only core modules

## Odoo is :

- 1.3x times smaller then the drupal
- 5.5x times smaller then the magento
- 1.9x times smaller then the prestashop

## In a Nutshell, Odoo...

- ... has had 95,464 commits made by 1,054 contributors representing 767,582 lines of code
- ... is mostly written in Python with an average number of source code comments
- ... has a well established, mature codebase maintained by a very large development team with decreasing Y-O-Y commits
- ... took an estimated 207 years of effort (COCOMO model) starting with its first commit in December, 2006 ending with its most recent commit about 1 month ago

## Languages



## Lines of Code



## 30 Day Summary

Mar 18 2014 — Apr 17 2014

1343 Commits

45 Contributors  
including 7 new contributors

## 12 Month Summary

Apr 17 2013 — Apr 17 2014

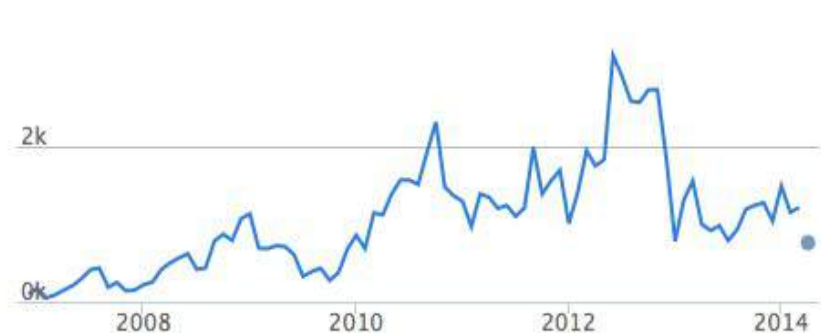
13571 Commits

Down -11979 (46%) from previous 12 months

179 Contributors

Down -87 (32%) from previous 12 months

## Commits per Month



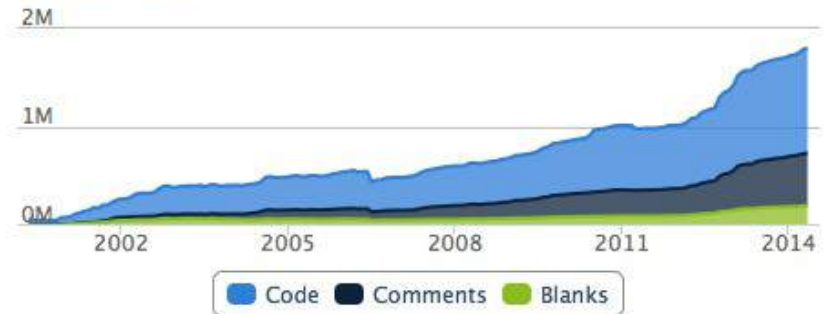
## In a Nutshell, Drupal (core)...

- ... has had 94,504 commits made by 149 contributors representing 1,060,131 lines of code
- ... is mostly written in PHP with an average number of source code comments
- ... has a well established, mature codebase maintained by a large development team with stable Y-O-Y commits
- ... took an estimated 297 years of effort (COCOMO model) starting with its first commit in May, 2000 ending with its most recent commit 2 days ago

## Languages



## Lines of Code



## 30 Day Summary

May 1 2014 — May 31 2014

289 Commits

6 Contributors

## 12 Month Summary

May 31 2013 — May 31 2014

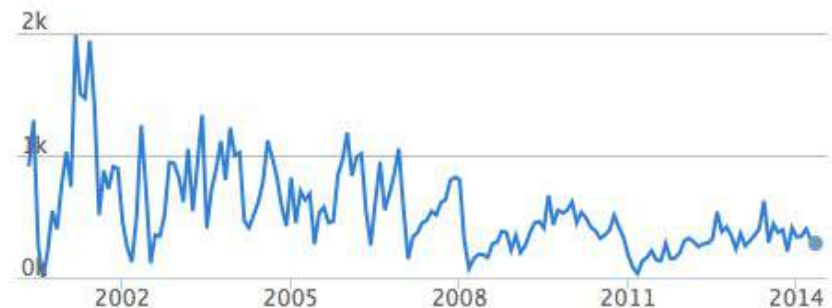
4527 Commits

Up +215 (4%) from previous 12 months

9 Contributors

Down -60 (86%) from previous 12 months

## Commits per Month





## In a Nutshell, Magento...

- ... has had 499 commits made by 8 contributors representing 8,331,528 lines of code
- ... is mostly written in PHP with a well-commented source code
- ... has a well established, mature codebase maintained by a average size development team with stable Y-O-Y commits
- ... took an estimated 2,536 years of effort (COCOMO model) starting with its first commit in June, 2008 ending with its most recent commit 3 days ago

## Languages



## Lines of Code



## 30 Day Summary

Apr 30 2014 — May 30 2014

5 Commits  
1 Contributor

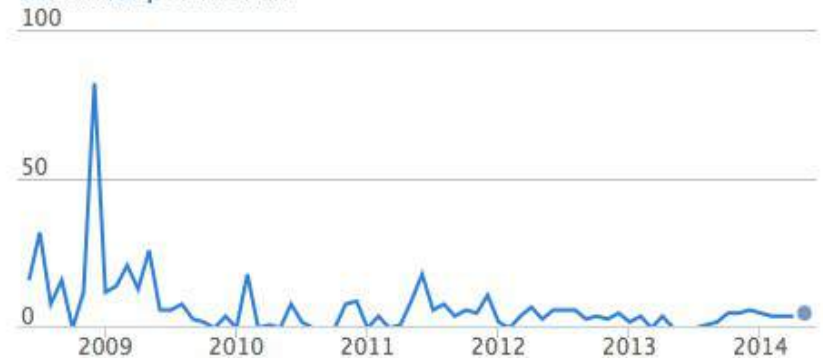
## 12 Month Summary

May 30 2013 — May 30 2014

41 Commits  
Down -2 (4%) from previous 12 months

4 Contributors  
Up +2 (100%) from previous 12 months

## Commits per Month



## In a Nutshell, PrestaShop...

... has had 25,861 commits made by 277 contributors representing 284,845 lines of code

... is mostly written in PHP with an average number of source code comments

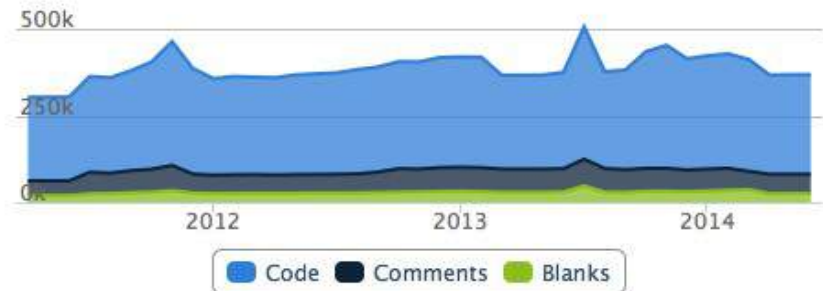
... has a codebase with a long source history maintained by a very large development team with stable Y-O-Y commits

... took an estimated 74 years of effort (COCOMO model) starting with its first commit in April, 2011 ending with its most recent commit 3 days ago

## Languages



## Lines of Code



## 30 Day Summary

May 2 2014 — Jun 1 2014

344 Commits

34 Contributors

including 12 new contributors

## 12 Month Summary

Jun 1 2013 — Jun 1 2014

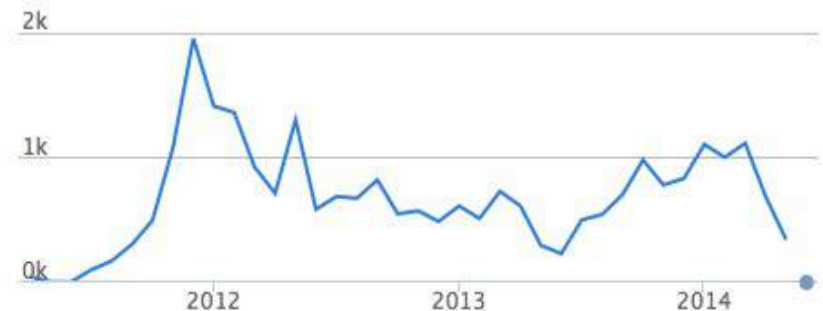
8836 Commits

Up +1689 (23%) from previous 12 months

197 Contributors

Up +106 (116%) from previous 12 months

## Commits per Month





# Conclusion



# Conclusion

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## Performance :

- Odoo is 3x times faster than the Drupal
- Odoo is 6x times faster than the Magento
- Odoo is 2x times faster than the Prestashop

## Scalability :

- Odoo timeout at 198 users
- Drupal timeout at 125 users
- Magento timeout at 148 users
- Prestashop timeout at 104 users

## Maintainability :

- 1.3x times smaller then the drupal
- 5.5x times smaller then the magento
- 1.9x times smaller then the prestashop



Questions ?



# Thank You

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